

Life-line Smart Gateway Broadband Kit Area & Personal Monitor



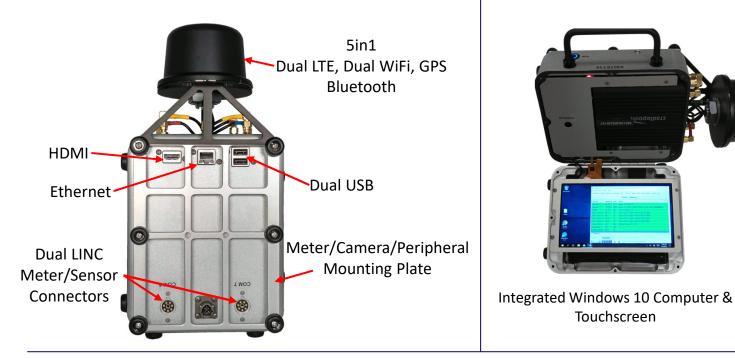
Benchmarking the definition of a portable emergency command center the Life-line Smart Gateway Broadband Kit combines a 4G broadband hot spot with the smarts of a fully functional Windows 10 computer. This combination provides a stand-alone solution for emergency response, crisis management, remote connectivity, operations backup and environmental monitoring.



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Life-line Smart Gateway Broadband Kit



The Safe Environment Engineering (SEE) Life·line Smart Gateway Broadband Kit integrates many elements Emergency Response and sensor data acquisition into a single self-contained portable enclosure. The Smart Gateway hosts a rapid deployable wireless network suite along with an integrated fully functional Windows 10 computer. The Gateway incorporates a large variety of connection ports including dual USB, Serial, Ethernet, Bluetooth, WiFi and SEE's LINC sensor cable connector. Data transmission is managed though an integrated 3G/4G/LTE/5G (expandable) cellular router/WiFi hotspot hosting redundant broadband carriers, as well as, being FirstNet compatible.

Specifications				
General Enclosure: Rugged Machined Aluminum Size: 7.26" x 5.76" x 3.38" (18.44 x 14.63 x 8.59 cm) Weight: 6.5lbs Antennas: Omni Directional, 2.4GHz, 5dBi, SMA Dipole Blade, 698-960/1700-2700MHz, 2/3dBi, SMA Helical GPS, 1575MHz, -0.5dBi, SMA Antenna Connector: Type SMA Power: Battery Li-ion 15 Hour Operation AC 100-240V 50/60Hz 0.8A DC 14V 2.0A Lights: Power, GPS, Modem, Signal Strength Connectors: Ethernet, USB (x2), HDMI, Bluetooth, LINC Cable (x2) Cellular Router – Cradlepoint IBR900-1200M	Integrated Computer Processor: Intel Cherry Trail Z8350 Quad Core Base Frequency: 1.44GHz (1.92GHz Burst Frequency) Operating System: Windows 10 IoT Enterprise RAM: 4GB DDR3L Storage Capacity: 64GB GPU: Intel HD, 12 EUs @200-500Mhz, single-channel memory USB: 3.0 x 1, USB 2.0 x 2 Connectivity: Wi-Fi 802.11n 2.4G, Bluetooth 4.0 Integrated Arduino Co-processor: ATmega32u4 (Leonardo Video output: HDMI and MIPI-DSI Onboard touch panel overlay connector Supports 100Mbps Ethernet Intel Processor GPIO x 6 ATmega Processor GPIO x 20			
 LTE: Embedded FirstNet Ready[™] LTE-Advanced Modem with Fallback 5G: Expandable WiFi: 802.11 a/b/g/n/ac wave 2; 128 Connected Devices; Dual-band Carriers: All North American, European & Asia Pacific, Saudi Arabia (AT&T, FirstNet, Verizon, T-Mobile, Rogers, TELUS, Bell) Ethernet Ports: 2 LAN/WAN switchable 10/100/1000 GPS/GNSS: TAIP & NMEA 0183 V3.0 Cloud Managed: NetCloud Manager 	LINCmrs Detectors Gamma Nal: 2 in (50.8 mm) 3 in (76.2 mm) Gamma (High Dose Rate): Energy Compensated Geiger-Müller Detector Neutron ³ He Proportional Counter Tube: 19 mm (0.75 in) 106.7 mm (4.20 in); net: 18 mm (0.71 in) 75.7 mm (2.98 in); 8 atm (8.106 bar); surrounded by polyethylene moderator			

Life-line Smart Gateway Broadband Kit Area & Personal Monitor



Area Monitor - Attach, Plug-in and/or Connect Meters <u>www.safeenv.com/integrated-instruments/</u> Rapid Deployment Go-Kit Models Available Image: Constraint of the second s

Personal Smartphone Monitor Confined Space / Refinery / Chemical Processing Intrinsically Safe, Connect via WiFi and/or Cellular

Autonomous Operation - Not dependent on

Advantages / Benefits

•

- Modular (mix and match meters)
- Command / Tech Ref locations just need computer & Internet to view
- Intrinsically Safe Smartphone options
- Connect using WiFi, Cellular or both FirstNet Ready Gateway and Smartphone

other Smart Gateways or Modems

• Rapid deployment Go-Kits



Events

LINCmrs

The Lifeline Interoperable Network Communicator Mobile Radiological System (LINCmrs) supports a FLIR Nal 2x3 or 4x6 inch crystal radiation detector (with Neutron detection option) capable of immediate isotope identification and spectra generations. The detector incorporates a Smart Gateway system independently collecting, storing, reporting and analyzing detection information.



Wireless Smartphone remote control providing simple single click operation.





Transportable



Fixed

No wireless setup

Life-line Smart Gateway Broadband Kit Area & Personal Monitor

Smart Gateway Software

Share	re Legend Connected Clients HotSp			ot					
Missi	ng Fields	Missing App	Started	Ping	Stopped	StandAlone	Off	Details	~
mac		ip		LastUp	date	ActivityID	SourceLine		
-	00.08.6	B:23:D2:42 -No	PAddress-	7/11/3	2018 19:40:2	26 PM			
1	00:09:4	C:3E:9A:9D 19	2.168.3.157	7/11/3	2018 19:40:2	6 PM 8507	Stride Servera	2016Meter,AFD_LIN	Cmrs_D
	1C:65:9	D:EB:29:88 19	2.168.3.102	7/11/2	2018 19:40:2	6 PM			

File Edit Run Admin Help

martGateway Chart All CAP Alet RadResponder GPS SEECAM Training battery cellsig diskapace memory sinr

sensor	reading	unit	other
battery	16.29	V	low=14 high=12
Signal	-69.00	dBm	low=-75 high=-80,04:56:19 Verizon mdm-fe
SINR	9.60	dB	low=0 high=-7,
CPU Core #1	77	°F	low=155.2 high=164.9 (75.2 194)
CPU Core #2	77	°F	low=155.2 high=164.9 (75.2 194)
CPU Core #3	78.8	°F	low=155.2 high=164.9 (78.8 194)
CPU Core #4	78.8	°F	low=155.2 high=164.9 (78.8 194)
Used Memory	1.5	GB	Percent used = 38.5
Available Memory	2.4	GB	
Used Space	23.2	%	

Lifeline Sensor Senser – Senses the wireless sensor/instrument connected and auto launches the corresponding Lifeline monitoring application for displaying, managing and reporting sensor/instrument readings.

Smart Gateway Meter App – Monitors the Smart Gateway as if it was a sensor. This Meter Application monitors internal battery level, LTE signal strength, computer temperature/capacities and GPS location information. The application provides warning and alarms in the event of a low battery, poor coverage and/or excessive heat conditions.



Gateways Utilized Significant Events

Hawaii Volcano Eruption Indianapolis 500 100th Papal Visit Boston Marathon Rose Bowl Super Bowl RNC Superstorm Sandy Joplin Tornado Academy Awards

Inauguration DNC West Texas Explosion Pro Bowl World Series



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